SWM_ps_Remote_Polarity_Instructions_6x20x05.doc

If the SWM p.s. has problems reversing using the normal pet page MCR uses then try reversing it using this procedure.

The normal pet page MCR uses can be found in the pet tree like this:
AGS>SAFETY>CRITICAL DEVICES>CDEV_MAGMAN

The pet page I would like you to try for this procedure is found in the pet tree like this:
FEC's>MAGNETS>ATR>CFE-WH-PS2. See page 2 for a copy of the pet page. See page 3 for instructions.

		Ramp Times Sec	WFG set point	WFG Output	PS State	PS IFC Current Meas	MADC Current Meas	WFG link Erro	E
wfg.wq1-ps	DoIt	1	174.72	50.00	On	49.96	50.03	None	Nor
wfg.wq2-ps	DoIt	1	267.31	49.99	On	50.69	50.90	None	Nor
wfg.wq3-ps	DoIt	1	196.20	50.00	On	49.87	49.99	None	Nor
wfg.wq4-ps	DoIt	1	179.89	50.00	On	49.64	49.55	None	Nor
wfg.wq5-ps	DoIt	1	167.77	50.00	On	50.28	49.88	None	Nor
wfg.wq6-ps	DoIt	1	50.00	49.99	On	49.75	50.29	None	Nor
wfg.wp1-ps	DoIt	1	332.00	49.99	On	49.99	49.81	None	Fra
wfg.wp2-ps	DoIt	1	328.50	49.99	On	49.87	50.05	None	Nor
wfg.warc20-ps	DoIt	1	2516.53	200.08	On	-195.11	200.19	None	Nor
wfg.swm-ps	DoIt	2	199.95	199.95	On	-187.26	182.13	None	Nor
wfg.xarc90-ps	DoIt	1.5	2267.01	200.04	On	-196.54	196.94	None	Nor
wfg.yarc90-ps	DoIt	1	199.97	200.07	On	-200.82	202.92	None	Nor
psctrl.wq1-ps	Ctrl	State			Status			R IO Lnk	
psctrl.wq1-ps	On	On	B	B	0x8	On, Remote	0x0		
psctrl.wq2-ps	On	On	B	B	0x8	On, Remote	0x0		
psctrl.wq3-ps	On	On	B	B	0x8	On, Remote	0x0		
psctrl.wq4-ps	On	On	B	B	0x8	On, Remote	0x0		
psctrl.wq5-ps	On	On	B	B	0x8	On, Remote	0x0		
psctrl.wq6-ps	On	On	B	B	0x8	On, Remote	0x0		
psctrl.wp1-ps	On	On	B	B	0x8	On, Remote	0x0		
psctrl.wp2-ps	On	On	B	B	0x8	On, Remote	0x0		
psctrl.warc20-ps	On	On	B	B	0x8	On, Remote	0x0		
psctrl.swm-ps	On	On	A	A	0x8008	On, Remote	0x0		
psctrl.xarc90-ps	On	On	B	A	0x8008	On, Remote	0x0		
psctrl.yarc90-ps	On	On	B	A	0x8008	On, Remote	0x0		

Instructions

1) On the pet page, shown on page 2, make sure the SWM p.s. is in the ON state. This is under the status column.
2) Set the ramp time to 2 seconds for the SWM p.s.
3) Set WFG SET POINT to zero amps.
4) Click DO IT.
5) The SWM should go to zero current, make sure the readback says zero current. This readback can be found in the column that says PS IFC CURENT MEAS and MADC CURRENT MEAS.
6) Now the column immediately to the right of the STATE column has no heading. This is the polarity command column and the column to the right of this is the polarity readback column. Since you are at zero currenta nd ON you can change the polarity under the POLARITY COMMAND column. The readback polarity should change to match this.
7) Now ramp up the p.s. to the desired setpoint.
8) You can also try to go to STBY and change the polarity if you wish and then turn the p.s. back on, with a zero setpoint. Before you go to STANDBY the setpoint should be at zero so when you turn on the setpoint will already be at zero.
9) There is a scope set up on the p.s. The grey trace is a saved trace of the setpoint. This is when the setpoint had a problem. You can see the setpoint ramps down and then up and then down again. This is not good. It should ramp down smoothly. The yellow trace is the LIVE setpoint and the blue trace is the magnet current. If you wish to view these when the supply is ramping you can.
10) If none of this works call Don Bruno.